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EXAMINER	
SINGH, RACHNA	

ART UNIT	PAPER NUMBER
2176	

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11/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/713,863	WOLSKA ET AL.	
	Examiner	Art Unit	
	Rachna Singh	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 10/23/07.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-54 is/are pending in the application.

4a) Of the above claim(s) 31-54 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-30 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 14 November 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is response to communications: A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/23/07 has been entered.

2. Claims 1-54 are pending. Claims 31-54 have been withdrawn. Claims 1 and 16 are independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary ski/ll in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 6-10, 12-18, 20-24, and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foltz et al., US 6,356,864 B1, 03/12/02 in view of Brill et al.,

US 2004/0002994 A1, 01/01/04 (filed 06/27/02) and Schabes et al., US 2004/0093567 A1, 05/13/04 (filed 05/22/02).

In reference to claim 1, Foltz teaches a method for analysis and evaluation of the semantic content of a writing which meets the preamble, ***a method for automatically evaluating an essay to detect at least one writing style error***. See abstract. Foltz discloses the following:

-Evaluating a sample text, such as an essay or document of a student. The essay is read and stored which meets the limitation, ***electronically receiving an essay on a computer system***. See column 9, lines 44-50, column 10, lines 63-65, and figure 2, element 40.

-Creating trained matrices where a matrix is created by including unique terms used in two or more reference documents. The reference text is parsed into text objects and segments (Compare to ***text segments***). The matrix is a text object (row) by segment (column) matrix. Each object is a unique word, concept, or phrase. Each cell entry represents the number of times the text object (i) appears in text segment (j). See column 10, lines 9-18. This meets the limitation, ***assigning a feature value for each of one or more features for one or more text segments in the essay***. The segment vector represents individual reference documents. Each document is allocated a single vector in the data matrix. A weighted value is applied to each cell. This meets the

limitation, ***wherein the feature values are automatically calculated by the computer system***. The weighted cells are proportional representation of the importance of the cell's original information, for example, rare words are given more weight. See column 10, lines 18-29. The vector representation of at least one standard reference text used to create the data matrix is created. The vector representation of the standard reference text is the average of the text object vectors using each element of the text objects within the standard reference text. This is computed as the average of the sum of each element of the text object vectors in the corresponding document row in matrix DS. Similarly, a vector representation of the un-graded student essay is also generated. It is the average of the vector elements contained in the un-graded student essay. See column 10, lines 63-67 and column 11, 1-29. This meets the limitation, ***storing the feature values for the one or more text segments on a data storage device accessible by the computer system***.

-Comparing a student's essay, the un-graded sample text, to a standard reference text, a pre-graded text. See column 9, lines 40-67. Computing similarities between the pseudo-object vector representation of the un-graded student essay and the vector representation of the pre-graded essay which meets the limitation, ***comparing the feature values fore ach one or more text segments with a model configured to identify at least one writing style error***. See column 12, lines 28-67. The pre-graded or standard reference text is text that has either been manually typed by a user (i.e. human) or recited into a speech-to-text translator by a user (i.e. human) which meets

the limitation, ***wherein the model is based on at least one human evaluated essay***. See column 9, lines 63-67 and column 10, lines 1-6.

Foltz does not teach *the model includes at least one decision tree to determine a probability associated with a likelihood of the at least one writing style error.*

Brill discloses an error model used to predict various errors via probabilities using a decision tree such as the likelihood of letters and sequences being added and deleted which meets the limitation, ***the model includes at least one decision tree to determine a probability associated with a likelihood of the at least one writing style error.*** See pages 4,-5 paragraph [0051].

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include Brill's model with a decision tree to determine a probability associated with an error in the system of Foltz in order to determine the likelihood of a writing style error because it was desirable at the time of the invention to facilitate error correction automatically based on previous user activity. See pages 1-2.

Foltz does not teach, *displaying an indication of an identified writing style error.* Schabes discloses a spelling and grammar checking system in which a spelling suggestion module suggests corrections for misspelled words. The spelling suggestion module determines a list of replacement words for the identified misspelled word and determines a list of alternate words. The module also identifies portions of the misspelled word that sound similar to portions of the correctly spelled words. The list of alternative words that is output by the suggestion module is passed to the automaton conversion module. See page 5, paragraphs [0066]-[0068], page 9, paragraph [0107]

and figure 11. Figure 11 illustrates a list of alternates for a word that misspelled. In displaying a list of alternates, Schabes discloses, "displaying an indication of an identified writing style error".

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Schabes' displaying of an indication of an identified writing style error in the system of Foltz because it was desirable at the time of the invention to highlight errors in a document such as misspelled words, incorrectly-used words, and contextual and grammatical errors in order to make corrections. See page 1, paragraph [0004]-[0014].

In reference to claim 2, Foltz teaches creating trained matrices where a matrix is created by including unique terms used in two ore more reference documents. The reference text is parsed into text objects and segments. The matrix is a text object (row) by segment (column) matrix. Each object is a unique word, concept, or phrase. Each cell entry represents the number of times the text object (i) appears in text segment (j). Compare to ***"repetitive use of word).*** See column 10, lines 9-18. Foltz's system computes similarities between the pseudo-object vector representation of the un-graded student essay and the vector representation of the pre-graded essay. See column 12, lines 28-67. This entails determining similarities about the frequency of a text object in a text segment. This also provides diagnostic information about the subject-matter present or lacking in the un-graded essay. See column 12, lines 54-67

and column 13, lines 1-2. Compare to ***"wherein the writing style error is the overly repetitive use of one or more text segments"***

In reference to claim 3, Foltz teaches the reference text is parsed into text objects and segments. Each object is a unique word, concept, or phrase. See column 10, lines 9-18.

In reference to claim 4, Foltz's system computes similarities between the pseudo-object vector representation of the un-graded student essay and the vector representation of the pre-graded essay. See column 12, lines 28-67. This entails determining similarities about the frequency of a text object in a text segment. This also provides diagnostic information about the subject-matter present or lacking in the un-graded essay. See column 12, lines 54-67 and column 13, lines 1-2. Compare to ***"presence or absence of features associated with each word in the essay"***.

In reference to claim 6, Foltz teaches creating trained matrices where a matrix is created by including unique terms used in two ore more reference documents. The reference text is parsed into text objects and segments. The matrix is a text object (row) by segment (column) matrix. Each object is a unique word, concept, or phrase. Each cell entry represents the number of times the text object (i) appears in text segment (j). Compare to ***"repetitive use of word).*** See column 10, lines 9-18. Foltz teaches each cell value for the text object that is vector element, is summed over the

entire row in the semantic-space matrix. This is the average of the vector elements the un-graded essay contains. See column 11, lines 8-17.

In reference to claim 7, Foltz teaches creating trained matrices where a matrix is created by including unique terms used in two ore more reference documents. The reference text is parsed into text objects and segments. The matrix is a text object (row) by segment (column) matrix. Each object is a unique word, concept, or phrase. Each cell entry represents the number of times the text object (i) appears in text segment (j). See column 10, lines 9-18. Foltz teaches each cell value for the text object that is vector element, is summed over the entire row in the semantic-space matrix. This is the average of the vector elements the un-graded essay contains. See column 11, lines 8-17. Compare to ***"ratio of evaluated text segment occurrences in the essay to the total number of text segments in the essay".***

In reference to claim 8, Foltz teaches each cell value for the text object that is vector element, is summed over the entire row in the semantic-space matrix. This is the average of the vector elements the un-graded essay contains. See column 11, lines 8-17. Foltz further discloses comparing a vector for each sentence wherein each sentence is compared to the following sentence within the same paragraph or next paragraph. See column 14, lines 60-67. Compare to ***"the average, over all paragraphs of the essay, of the ratio of evaluated text segment occurrences in a paragraph of the essay to the total number of text segments in the paragraph"***

In reference to claim 9, Foltz teaches each cell value for the text object that is vector element, is summed over the entire row in the semantic-space matrix. This is the average of the vector elements the un-graded essay contains. See column 11, lines 8-17. Foltz further discloses comparing a vector for each sentence wherein each sentence is compared to the following sentence within the same paragraph or next paragraph. See column 14, lines 60-67.

In reference to claim 10, Foltz teaches in column 1, lines 40-50, that the related prior art teaches calculating sentence length.

In reference to claim 12, Foltz teaches that word proximity in a document helps determine the frequency of words and semantic coherence of an essay. See column 1, lines 19-64. The proximity of words and frequency of words help determine the importance of the word and also the relevance of subject matter. The proximity of a word is defined as the distance between two words. Compare to ***"interval distance between consecutive text segment occurrences"***. Foltz teaches using word proximity between consecutive word occurrences in order to determine if a word is being used excessively in an essay and help minimize repetitiveness while improving coherency of the essay. See column 1.

In reference to claim 15, Foltz teaches Latent Semantic Analysis (LSA) which provides a trained set of matrices from which all texts can be compared for quality, quantity, and relevance of subject matter. See column 2, lines 20-65. The Latent Semantic Analysis is a trained learning tool because it provides a "trained" set of matrices based on a previously evaluated essay. A machine learning application is based on at least one evaluated essay thus Foltz's LSA is a machine learning tool.

In reference to claim 16, Foltz teaches a method for analysis and evaluation of the semantic content of a writing. See abstract. Compare to ***a system for automatically evaluating an essay to detect at least one writing style error***. Foltz discloses the following:

-Evaluating a sample text, such as an essay or document of a student. The essay is read and stored. See column 9, lines 44-50, column 10, lines 63-65, and figure 2, element 40. Compare to ***a computer system configured to electronically receive an essay***.

-Creating trained matrices where a matrix is created by including unique terms used in two ore more reference documents. The reference text is parsed into text objects and segments (Compare to ***text segments***). The matrix is a text object (row) by segment (column) matrix. Each object is a unique word, concept, or phrase. Each cell entry represents the number of times the text object (i) appears in text segment (j). See column 10, lines 9-18. Compare to ***a feature extractor configured to assign a feature value for each of one or more features for one or more text segments in***

the essay. The segment vector represents individual reference documents. Each document is allocated a single vector in the data matrix. A weighted value is applied to each cell. The weighted cells are proportional representation of the importance of the cell's original information, for example, rare words are given more weight. See column 10, lines 18-29. The vector representation of at least one standard reference text used to create the data matrix is created. The vector representation of the standard reference text is the average of the text object vectors using each element of the text objects within the standard reference text. This is computed as the average of the sum of each element of the text object vectors in the corresponding document row in matrix DS. Similarly, a vector representation of the un-graded student essay is also generated. It is the average of the vector elements contained in the un-graded student essay. See column 10, lines 63-67 and column 11, 1-29. Compare to ***a data storage device, connected to a computer system, configured to store the feature values for the one or more text segments***.

-Comparing a student's essay, the un-graded sample text, to a standard reference text, a pre-graded text. See column 9, lines 40-67. Computing similarities between the pseudo-object vector representation of the un-graded student essay and the vector representation of the pre-graded essay. See column 12, lines 28-67. Compare to ***"a feature analyzer configured to evaluate the essay for at least one writing style error by comparing the feature values for each of one or more text segments with a model***. The pre-graded or standard reference text is text that has either been

manually typed by a user (i.e. human) or recited into a speech-to-text translator by a user (i.e. human). See column 9, lines 63-67 and column 10, lines 1-6.

-Assigning a grade to the un-graded student essay based on the computing of similarities between the pseudo-object vector representation of the un-graded student essay and the vector representation of the pre-graded essay. See column 12, lines 28-67. Determining a degree of similarity between the two documents in order to assign a grade to the essay entails determining the errors. See columns 13-14. Outputting the graded essay. Compare to ***a display for presenting the evaluated essay***.

Foltz does not teach *the model includes at least one decision tree to determine a probability associated with a likelihood of the at least one writing style error.*

Brill discloses an error model used to predict various errors via probabilities using a decision tree such as the likelihood of letters and sequences being added and deleted which meets the limitation, ***the model includes at least one decision tree to determine a probability associated with a likelihood of the at least one writing style error.*** See pages 4,-5 paragraph [0051].

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include Brill's model with a decision tree to determine a probability associated with an error in the system of Foltz in order to determine the likelihood of a writing style error because it was desirable at the time of the invention to facilitate error correction automatically based on previous user activity. See pages 1-2.

Foltz does not teach, "wherein the evaluated essay includes an indication of at least one identified writing style error. Schabes discloses a spelling and grammar checking system in which a spelling suggestion module suggests corrections for misspelled words. The spelling suggestion module determines a list of replacement words for the identified misspelled word and determines a list of alternate words. The module also identifies portions of the misspelled word that sound similar to portions of the correctly spelled words. The list of alternative words that is output by the suggestion module is passed to the automaton conversion module. See page 5, paragraphs [0066]-[0068], page 9, paragraph [0107] and figure 11. Figure 11 illustrates a list of alternates for a word that misspelled. In displaying a list of alternates, Schabes discloses, "displaying an indication of an identified writing style error".

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Schabes' displaying of an indication of an identified writing style error in the system of Foltz because it was desirable at the time of the invention to highlight errors in a document such as misspelled words, incorrectly-used words, and contextual and grammatical errors in order to make corrections. See page 1, paragraph [0004]-[0014].

In reference to claim 17, Foltz teaches creating trained matrices where a matrix is created by including unique terms used in two ore more reference documents. The reference text is parsed into text objects and segments. The matrix is a text object (row) by segment (column) matrix. Each object is a unique word, concept, or phrase.

Each cell entry represents the number of times the text object (i) appears in text segment (j). Compare to ***"repetitive use of word).*** See column 10, lines 9-18. Foltz's system computes similarities between the pseudo-object vector representation of the un-graded student essay and the vector representation of the pre-graded essay. See column 12, lines 28-67. This entails determining similarities about the frequency of a text object in a text segment. This also provides diagnostic information about the subject-matter present or lacking in the un-graded essay. See column 12, lines 54-67 and column 13, lines 1-2. Compare to ***"wherein the writing style error is the overly repetitive use of one or more text segments"***

In reference to claim 18, Foltz teaches the reference text is parsed into text objects and segments. Each object is a unique word, concept, or phrase. See column 10, lines 9-18.

In reference to claim 20, Foltz teaches creating trained matrices where a matrix is created by including unique terms used in two ore more reference documents. The reference text is parsed into text objects and segments. The matrix is a text object (row) by segment (column) matrix. Each object is a unique word, concept, or phrase. Each cell entry represents the number of times the text object (i) appears in text segment (j). Compare to ***"repetitive use of word).*** See column 10, lines 9-18. Foltz teaches each cell value for the text object that is vector element, is summed over the

entire row in the semantic-space matrix. This is the average of the vector elements the un-graded essay contains. See column 11, lines 8-17.

In reference to claim 21, Foltz teaches creating trained matrices where a matrix is created by including unique terms used in two ore more reference documents. The reference text is parsed into text objects and segments. The matrix is a text object (row) by segment (column) matrix. Each object is a unique word, concept, or phrase. Each cell entry represents the number of times the text object (i) appears in text segment (j). See column 10, lines 9-18. Foltz teaches each cell value for the text object that is vector element, is summed over the entire row in the semantic-space matrix. This is the average of the vector elements the un-graded essay contains. See column 11, lines 8-17. Compare to ***"ratio of evaluated text segment occurrences in the essay to the total number of text segments in the essay".***

In reference to claim 22, Foltz teaches each cell value for the text object that is vector element, is summed over the entire row in the semantic-space matrix. This is the average of the vector elements the un-graded essay contains. See column 11, lines 8-17. Foltz further discloses comparing a vector for each sentence wherein each sentence is compared to the following sentence within the same paragraph or next paragraph. See column 14, lines 60-67. Compare to ***"the average, over all paragraphs of the essay, of the ratio of evaluated text segment occurrences in a paragraph of the essay to the total number of text segments in the paragraph"***

In reference to claim 23, Foltz teaches each cell value for the text object that is vector element, is summed over the entire row in the semantic-space matrix. This is the average of the vector elements the un-graded essay contains. See column 11, lines 8-17. Foltz further discloses comparing a vector for each sentence wherein each sentence is compared to the following sentence within the same paragraph or next paragraph. See column 14, lines 60-67.

In reference to claim 24, Foltz teaches in column 1, lines 40-50, that the related prior art teaches calculating sentence length.

In reference to claim 26, Foltz teaches that word proximity in a document helps determine the frequency of words and semantic coherence of an essay. See column 1, lines 19-64. The proximity of words and frequency of words help determine the importance of the word and also the relevance of subject matter. The proximity of a word is defined as the distance between two words. Compare to ***"interval distance between consecutive text segment occurrences"***. Foltz teaches using word proximity between consecutive word occurrences in order to determine if a word is being used excessively in an essay and help minimize repetitiveness while improving coherency of the essay. See column 1.

In reference to claim 29, Foltz teaches Latent Semantic Analysis (LSA) which provides a trained set of matrices from which all texts can be compared for quality, quantity, and relevance of subject matter. See column 2, lines 20-65.

In reference to claim 30, Foltz teaches the pre-graded or standard reference text is text that has either been manually typed by a user (i.e. human) or recited into a speech-to-text translator by a user (i.e. human). See column 9, lines 63-67 and column 10, lines 1-6.

In reference to claims 13-14 and 27-28, Foltz teaches that word proximity in a document helps determine the frequency of words and semantic coherence of an essay. See column 1, lines 19-64. The proximity of words and frequency of words help determine the importance of the word and also the relevance of subject matter. The proximity of a word is defined as the distance between two words or an interval distance. Foltz teaches using word proximity between consecutive word occurrences in order to determine if a word is being used excessively in an essay and help minimize repetitiveness while improving coherency of the essay. See column 1.

"Using word proximity" as taught by Foltz is analogous to determining the number of intervening words or characters because word proximity is the distance between two words or characters and is determined by somehow calculating the distance between the number of intervening words. Thus it would have been obvious to a person of ordinary skill in the art at the time of the invention to interpret Foltz's teachings of

determining word proximity as entailing the calculation of the distance between intervening words.

5. Claims 5, 11, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foltz et al., US 6,356,864 B1, 03/12/02 in view of Brill et al., US 2004/0002994 A1, 01/01/04 (filed 06/27/02), Schabes et al., US 2004/0093567 A1, 05/13/04 (filed 05/22/02), as applied to claims 1 and 16 above, and further in view of Mitchell, US 2003/0149692 A1, 08/07/03.

In reference to claim 5, Foltz does not expressly teach function words of the essay are not considered by the computer system in determining feature values.

Mitchell teaches the electronic assessment of free-form text against a standard for such text in which templates prepared from the standard are compared with semantically-syntactically tagged form of the free-form text and an output assessment is derived from the comparison. Mitchell teaches extracting propositions, adjectives, etc from the mark scheme answers to reduce variant forms of these words to their root form. The intent is to help simplify the word recognition and sentence analysis process by reducing the number of variations of the words. Thus certain words of the essay are not considered by the assessment tool since they are altered to the reduce variant form.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to not consider certain words when determining feature values to simplify

the word recognition and sentence analysis process by reducing the number of variations of the words.

In reference to claims 11 and 25, Foltz does not teach expressly teach the feature values comprise a value indicated whether a text segment includes a pronoun.

Mitchell teaches parsing a free-form text answer into constituent parts including nouns, verbs, adjectives, and proper names. See page 1, paragraphs [0003] and [0015]. The nouns are pattern matched in the student answer against nouns in the mark scheme. See figure 7.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Mitchell's indication of whether a noun is present as a feature of an essay in the system of Foltz in order to take into account potential variations in writing styles by matching potential variations of the pronoun to a word in the student answer/essay.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foltz et al., US 6,356,864 B1, 03/12/02 in view of Brill et al., US 2004/0002994 A1, 01/01/04 (filed 06/27/02), Schabes et al., US 2004/0093567 A1, 05/13/04 (filed 05/22/02), as applied to claim 16 above, and further in view of Spragins, US 2003/0023642 A1, 01/30/03 (filed 07/30/01).

In reference to claim 19, Foltz does not teach annotating the essay to identify one or more writing style errors.

Spragins teaches a means for inserting editorial markings and comments into an electronic writing to indicate errors in the writing. See abstract, figure 8, and pages 1-3.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include Spragin's teachings of annotating errors in a written document into the system of Foltz because it provides a visual indication to a user of an error present in the document and it was desirable at the time of the invention to insert markings in an electronic writing at specified locations to indicate that the area identified needed improvements due to errors. See page 1, paragraphs [0001] and [0011].

Response to Arguments

7. Applicant's arguments and amendments filed on 10/26/07 have been fully considered.

On page 11 of the Remarks, Applicant argues the prior art fails to teach *the model includes at least one decision tree to determine a probability associated with a likelihood of the at least one writing style error* as currently amended.

Examiner agrees Foltz does not teach *the model includes at least one decision tree to determine a probability associated with a likelihood of the at least one writing*

style error as currently amended. However, upon further search, Examiner finds Brill does.

Brill discloses an error model used to predict various errors via probabilities using a decision tree such as the likelihood of letters and sequences being added and deleted which meets the limitation, ***the model includes at least one decision tree to determine a probability associated with a likelihood of the at least one writing style error.*** See pages 4,-5 paragraph [0051].

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include Brill's model with a decision tree to determine a probability associated with an error in the system of Foltz in order to determine the likelihood of a writing style error because it was desirable at the time of the invention to facilitate error correction automatically based on previous user activity. See pages 1-2.

In view of the comments above, the rejection is maintained.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachna Singh whose telephone number is 571-272-4099. The examiner can normally be reached on M-F (8:30AM-6:00PM). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rachna Singh
11/28/07